

while the lophophore is thus expanded. Another set of muscles assist in closing the opening of the cœnocœcium, when the body is withdrawn ; or are attached to the stomach, which assist that organ in its functions.

*Plumatella repens* feeds on infusoria and small algæ which are drawn into the mouth by the currents created by the cilia attached to the tentacles. These cilia have an upward movement on one side of the tentacles and a downward one on the other.

Reproduction occurs in two modes : (a) by budding, (b) by statoblasts or winter eggs. Reproduction by budding merely increases the number of individuals in each colony, whilst reproduction by statoblasts assists in forming new colonies.

Statoblasts are flattened discs, round or oval, formed within the body, and escape after the death of the polypide when the whole colony disintegrates. Statoblasts are dark brown in colour and have an outer ring called the *Annulus*, formed of hexagonal cells. Others have barbed hooks along the margin. Statoblasts are excellent criteria for distinguishing one genus from another, or the different species of each genus.

Locality and habitat. Abundant on logs, sticks, stones in Patterson's Creek and in pits at Odell's Brick Works where the largest colony observed was found on a piece of board five feet long and ten inches wide entirely covering the under surface with innumerable colonies of this species. August 1898.

FREDERICELLA REGINA, Leidy.

This species is found growing with the preceding, which, it resembles somewhat in appearance. It is dendritic in form, of a light brown color, and usually attached by the trunk, the branches being mostly free. It covers a smaller area than *Plumatella* and is readily distinguished from it by its characteristic circular or oval lophophore, that of the former being horse-shoe-shaped. The tentacles are few in number, generally nineteen, and arranged on the crest in a single row. Contrary to the statement made by Hyatt and other workers on Polyzoa, *Fredricella regina* found at Ottawa was found in nearly every